



12-10-04

13
Bhu

PTO/SB/21 (09-04)

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/826,583
Filing Date	April 6, 2001
First Named Inventor	Unger, Marc
Art Unit	3753
Examiner Name	Chambers, A. Michael
Attorney Docket Number	20174C-003010US

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input checked="" type="checkbox"/> After Allowance Communication to Examiner <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): -Return Postcard -Copy of IDS, transmittal, and postcard submitted 12/14/2001 -Copies of nine (9) cited References from the 12/14/2001 IDS -Copy of IDS, transmittal, and postcard submitted 11/21/2001
<input type="checkbox"/> Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	Patrick M. Boucher		
Date	2004 December 7	Reg. No.	44,037

CERTIFICATE OF TRANSMISSION/MAILING

Express Mail Label: EV 326935304 US

I hereby certify that this correspondence is being deposited with the United States Postal Service with "Express Mail Post Office to Address" service under 37 CFR 1.10 on this date and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature			
Typed or printed name	Nicole Wartell	Date	12/8/04



I hereby certify that this correspondence is being deposited with the United States Postal Service with "Express Mail Post Office to Address" service under 37 CFR 1.10 on this date, addressed to:

PATENT
Attorney Docket No.: 20174C-003010US

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date DEC 8, 2004

Express Mail Label: EV 326935304 US

TOWNSEND and TOWNSEND and CREW LLP

By: 
Nicole M. Wartell

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Chambers, A. Michael

Art Unit: 3753

COMMUNICATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This communication provides courtesy copies of the Information Disclosure Statement filed on December 14, 2001. It appears from the Image File Wrapper on the U.S.P.T.O. website and file history that this IDS was never considered by the Examiner. The copy of the IDS provided is identical to that submitted on December 14, 2001. A copy of a date-stamped postcard is also enclosed to show prior receipt of the IDS by the U.S. Patent Office on January 23, 2002. Applicants also enclose herewith

copies of the cited non-patent literature references identical to those cited in the December 14, 2001 IDS for the Examiner's convenience.

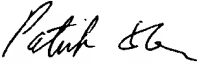
Applicants would also like to make the Examiner aware of the November 21, 2001 references that have not been made of record in this application. This communication provides courtesy copies of the Information Disclosure Statement filed on November 21, 2001. The copy of the IDS provided is identical to that submitted on November 21, 2001. A copy of a date-stamped postcard is also enclosed to show prior receipt of the IDS by the U.S. Patent Office on January 4, 2002. The references cited in this particular IDS were submitted to the U.S. Patent Office by hand on January 23, 2004.

Applicants request that cited references from the Information Disclosure Statements submitted on December 14, 2001 and the non-patent literature references submitted on November 21, 2001 be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicants request that Examiner Chambers consider these references and provide applicants a checked-off copy of the attached Information Disclosure Statements to show that these references have been considered pursuant to 37 CFR § 1.97.

If the Examiner has any questions regarding this submission, please call the undersigned at 303-571-4000.

Respectfully submitted,


Patrick M. Boucher
Reg. No. 44,037

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: (415) 576-0200
Fax: (415) 576-0300
PMB:nmb



TO THE U.S. PATENT AND TRADEMARK OFFICE:
Accompanying this postcard are the documents listed below.
Please stamp the date of your receipt, and return this card to us as
evidence of their safe and complete arrival.

Documents:

- 1) Supplemental Information Disclosure Statement Under 37 CFR §1.97
and §1.98
- 2) Form PTO/SB/08A/08B
- 3) Return Postcard

Applicant: Unger et al.

Application No.: 09/826,583

Filing Date: April 6, 2001

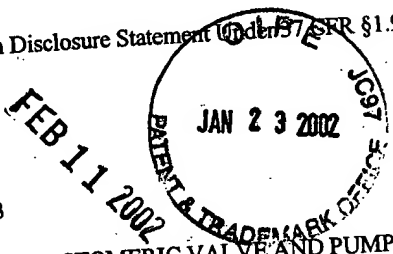
For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP
SYSTEMS

Date Due:

Date of Mailing: 12/14/2001

Attorney: KJT sec. crf

Attorney Docket: 20174C-003010US



TO THE U.S. PATENT AND TRADEMARK OFFICE:

Accompanying this postcard are the documents listed below.
Please stamp the date of your receipt, and return this card to us as
evidence of their safe and complete arrival.

Documents:

- 1) Supplemental Information Disclosure Statement Under 37 CFR §1.97
and §1.98
- 2) Form PTO/SB/08A/08B
- 3) Return Postcard

Applicant: Unger et al.

Application No.: 09/826,583

Filing Date: April 6, 2001

For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP
SYSTEMS

Date Due:

Date of Mailing: 12/14/2001

Attorney: KJT sec. crf

Attorney Docket: 20174C-003010US

Please type a plus sign (+) inside this box → ☐

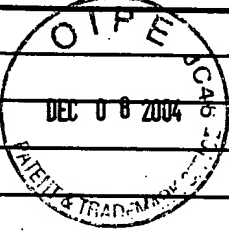
RPTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

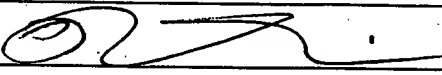
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

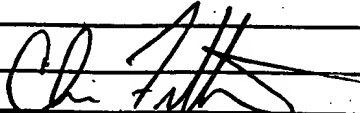
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/826,583	
	Filing Date	04/06/2001	
	First Named Inventor	Unger	
	Group Art Unit	1772	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	1	Attorney Docket Number	2017C4-003010US



ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1) Return receipt postcard
Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430. Total number of pages <u>does not</u> include cited references.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm and Individual name	Townsend and Townsend and Crew LLP Kent J. Tobin Reg No. 39,496
Signature	
Date	December 14, 2001

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: December 14, 2001			
Typed or printed name	Chris Fitting		
Signature		Date	December 14, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. PA 3189996 v1



PATENT
Attorney Docket No.: 20174C-003010US
Client Reference No.: CIT No.: P3492

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Unassigned

Art Unit: 1772

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37 CFR
§1.97 and §1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached form PTO/SB/08A/08B are being called to the attention of the Examiner. In accordance with CFR §1.98(d), copies of the references can be found in Application No. 09/724,784, filed November 28, 2000 (Attorney docket No. 20174C-003000US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Kent J. Tobin
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
KJT:crf

PA 3189999 v1

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

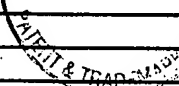
(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

Application Number 09/826,583
 Filing Date 04/06/01
 First Named Inventor Unger
 Group Art Unit 1772
 Examiner Name Unassigned
 Attorney Docket Number 20174C-003010US

DEC 8 2004



U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner
Signature

Date
Considered

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known	
		Application Number	09/826,583
		Filing Date	04/06/01
		First Named Inventor	Unger
		Group Art Unit	1772
		Examiner Name	Unassigned
Sheet 2 of 2	Attorney Docket Number	20174C-003010US	

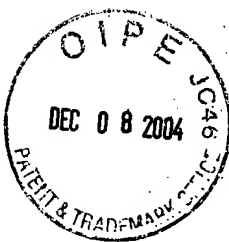
OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Ahn et al., "Fluid Micropumps Based on Rotary Magnetic Actuators," <u>Proceedings of 1995 IEEE Micro Electro Mechanical Systems Workshop (MEMS '95)</u> , held in Amsterdam, Netherlands on 1/29-2/2/95, pgs. 408-412 (1995).	
	2	Benard et al., "A Titanium-Nickel Shape-Memory Alloy Actuated Micropump," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 1:361-364 (1997).	
	3	Gerlach, T., "Pumping Gases by a Silicon Micro Pump with Dynamic Passive Valves," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 1:357-360 (1997).	
	4	Jerman, H., "Electrically-Activated, Normally-Closed Diaphragm Valves," <u>Proceedings of Transducers '91</u> , 1991 International Conference on Solid-State Sensors and Actuators, pages 1045-1048 (1991).	
	5	Olsson et al., "Simulation Studies of Diffuser and Nozzle Elements for Valve-less Micropumps," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 2:1039-1042 (1997).	
	6	Shoji et al., "Smallest Dead Volume Microvalves for Integrated Chemical Analyzing Systems," <u>Proceedings of Transducers '91</u> , 1991 International Conference on Solid-State Sensors and Actuators, pages 1052-1055 (1991).	
	7	Vieider et al., "A Pneumatically Actuated Micro Valve with a Silicone Rubber Membrane for Integration with Fluid-Handling Systems," <u>Proceedings of Transducers '95</u> , the 8th International Conference on Solid-State Sensors and Actuators and Eurosensors IX, held in Stockholm, Sweden on 6/25-29/95, 2:284-286 (1995).	
	8	Xia et al., "Micromolding in Capillaries: Applications in Material Science," <u>J. American Chemical Society</u> , 118:5722-5731 (1996).	
	9	Yang et al., "A MEMS Thermopneumatic silicone Membrane Valve," <u>Proceedings of the IEEE 10th Annual Workshop of Micro Electro Mechanical Systems Workshop (MEMS '97)</u> , held 1/26-30/97 in Nagoya, Japan, pages 114-118 (1997).	

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
PA 3190002 v1



TO THE U.S. PATENT AND TRADEMARK OFFICE:
Accompanying this postcard are the documents listed below.
Please stamp the date of your receipt, and return this card to us as
evidence of their safe and complete arrival.

Documents:

- 1) Supplemental Information Disclosure Statement Under 37 CFR §1.97
and §1.98
- 2) Form PTO/SB/08A/08B
- 3) Return Postcard

Applicant: Unger et al.
Application No.: 09/826,583
Filing Date: April 6, 2001

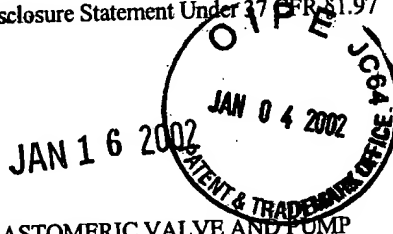
For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP
SYSTEMS

Date Due:

Date of Mailing: 11/21/2001

Attorney: KJT sec. crf

Attorney Docket: 20174C-003010US



TO THE U.S. PATENT AND TRADEMARK OFFICE:

Accompanying this postcard are the documents listed below.
Please stamp the date of your receipt, and return this card to us as
evidence of their safe and complete arrival.

Documents:

- 1) Supplemental Information Disclosure Statement Under 37 CFR §1.97
and §1.98
- 2) Form PTO/SB/08A/08B
- 3) Return Postcard

Applicant: Unger et al.
Application No.: 09/826,583
Filing Date: April 6, 2001

For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP
SYSTEMS

Date Due:

Date of Mailing: 11/21/2001

Attorney: KJT sec. crf

Attorney Docket: 20174C-003010US

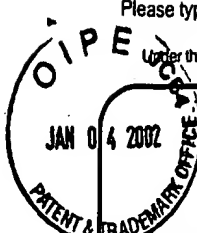
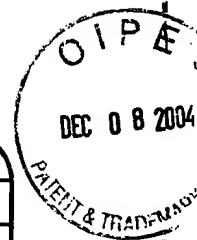
Please type a plus sign (+) inside this box → ☐

RPTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/826,583	
	Filing Date	04/06/2001	
	First Named Inventor	Unger	
	Group Art Unit	1772	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	1	Attorney Docket Number	2017C4-003010US

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1) Return receipt postcard
Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430. Total number of pages <u>does not</u> include cited references.	

RECEIVED
JAN 10 2002
TC 1700

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm and Individual name	Townsend and Townsend and Crew LLP Kent J. Tobin Reg No. 39,496
Signature	
Date	November 21, 2001

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: November 21, 2001			
Typed or printed name	Chris Fitting		
Signature		Date	November 21, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. PA 3185609 v1

RECEIVED

APR 15 2002

TECHNOLOGY CENTER R3700



PATENT
Attorney Docket No.: 20174C-003010US
Client Reference No.: CIT No.: P3492

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Unassigned

Art Unit: 1772

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37 CFR
§1.97 and §1.98**

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached form PTO/SB/08A/08B are being called to the attention of the Examiner. In accordance with CFR §1.98(d), copies of the references can be found in Application No. 09/724,784, filed November 28, 2000 (Attorney docket No. 20174C-003000US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Kent J. Tobin
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
KJT:crf

PA 3184064 v1

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/826,583
		Filing Date	04/06/01
		First Named Inventor	Unger
		Group Art Unit	1772
		Examiner Name	Unassigned
Sheet 1 of 2	Attorney Docket Number	20174C-003010US	

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

+

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2

of

2

Complete if Known

Application Number	09/826,583
Filing Date	04/06/01
First Named Inventor	Unger
Group Art Unit	1772
Examiner Name	Unassigned
Attorney Docket Number	20174C-003010US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Gass et al., "Integrated flow-regulated silicon micropump," <u>Sensors and Actuators A</u> , 43335-338 (1994).	
	2	Sohn et al., "Capacitance cytometry: Measuring biological cells one by one," <u>PNAS</u> , 97(20):10687-10690 (2000).	
	3	Zengerle et al., "A Micro Membrane Pump with Electrostatic Actuation," <u>1992 IEEE Conf. on Micro Electro Mechanical Systems</u> , held 2/4-7/92 in Travemunde Germany, pgs. 19-24.	
	4	Zengerle et al., "Performance Simulation of Microminiaturized Membrane Pumps," from 7th International Conference on Solid-State Sensors and Actuators held 6/7-10/93 in Yokohama Japan, pages 106-109.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
PA 3184066 v1

RECEIVED
APR 15 2002
TECHNOLOGY CENTER R3700